

IN THE CLAIMS:

A complete listing of the claims is set forth below, renumbered according to the Examiner's amendment that corrected the previously submitted claims, which included two claims numbered 34. Please amend the claims as follows:

1. **(Currently Amended)** A security system for a computer system, comprising:
a plurality of assets within the computer system;
a plurality of members registered to use the computer system;
a plurality of groups, each group comprising at least two of the plurality of members;
a plurality of roles defining user rights to access one or more of the plurality of assets, each member and each group associated with at least one role;
a plurality of access control lists each corresponding to an asset and defining at least one privilege for accessing the asset corresponding to the privilege, according to a member's role; and
at least one domain being an administrative and access control boundary around a plurality of security entities, the security entities of the at least one domain comprising:
a subset of the plurality of assets and the access control lists corresponding to the assets in the subset of the assets;
a subset of the plurality of roles; and
a subset of the members;
each privilege defined in the access control lists of the at least one domain identifying one or more roles in the domain that may access the asset corresponding to the privilege;
the security system operable to authorize a particular member to perform a requested operation with respect to a requested asset within the domain when the particular member is associated with a role, in the domain, corresponding to a privilege for the requested asset.

2. **(Currently Amended)** The system of Claim 1, wherein:
the privileges for each asset include operations that can be performed on that asset; and

the security system is operable to authorize access to the requested asset when a requested access by the particular member includes an operation to be performed from the access control list and the particular member is associated with a role, in the domain, corresponding to a privilege for the requested asset.

3. **(Previously Presented)** The system of Claim 1, wherein the at least one privilege includes one or more of:

- a read privilege;
- a modify privilege; and
- a delete privilege.

4-5. **(Cancelled)**

6. **(Original)** The system of Claim 1, wherein the system includes at least two domains.

7. **(Currently Amended)** A method for providing secure access to a plurality of assets within a computer system, comprising:

- registering a plurality of members to use the computer system;
- establishing a plurality of groups, each group comprising at least two of the plurality of members;

- providing a plurality of roles defining user rights to access one or more of the plurality of assets, each member and each group associated with at least one role;

- providing a plurality of access control lists each corresponding to an asset and defining at least one privilege for accessing the asset corresponding to the privilege, according to a member's role;

- providing at least one domain defining an administrative and access control boundary around a plurality of security entities, the security entities of the at least one domain comprising:

- a subset of the plurality of assets and the access control lists corresponding to the assets in the subset of the assets;

- a subset of the plurality of roles; and

a subset of the members;
each privilege defined in the access control lists of the at least one domain
identifying one or more roles in the domain that may access the asset corresponding to
the privilege;
when a particular member attempts to access a requested asset within the at least
one domain, determining at least one role assigned to the particular member;
comparing rights corresponding to the role assigned to the particular member to the
privileges defined in the access control list corresponding to the particular asset; and
if the attempted access is authorized for the role assigned to the particular member,
allowing the particular member to access the requested asset.

8. **(Original)** The method of Claim 7, wherein a requested access is one from
the types read, modify, or delete.

9. **(Previously Presented)** The method of Claim 7, further comprising, prior to
the particular member attempting to access the requested asset:
authenticating the particular member's identification; and
assigning at least one role to the particular member.

10. **(Previously Presented)** The system of Claim 6, wherein the plurality of
roles comprise one or more of:
a domain role defining user rights within a single domain; and
a universal role defining user rights across a plurality of domains.

11. **(Previously Presented)** The system of Claim 6, wherein a first domain and
a second domain are joined by a unidirectional trust relationship, allowing privileges
associated with the first domain's assets to be delegated to the second domain.

12. **(Previously Presented)** The system of Claim 6, wherein a first domain and
a second domain are joined by a bidirectional trust relationship, allowing:
privileges associated with the first domain's assets to be delegated to the second
domain; and

privileges associated with the second domain's assets to be delegated to the first domain.

13. **(Previously Presented)** The system of Claim 6, wherein a first domain owns a second domain such that the first domain can create and destroy the second domain.

14. **(Previously Presented)** The system of Claim 1, wherein the plurality of roles are assigned to a plurality of user groups, each user group comprising one or more of the plurality of members.

15. **(Previously Presented)** The system of Claim 1, wherein each of the plurality of access control lists comprises a plurality of access control entries, each comprising:

- a domain identifier;
- a role identifier; and
- one or more privileges.

16. **(Previously Presented)** The system of Claim 1, wherein:
the system comprises at least two domains; and
the system is further operable to grant the particular member, which is assigned a particular domain/role combination, ownership of a particular operation on a particular access control list, ownership over of the particular access control list allowing the particular member to grant rights to perform the operation to one or more members in a different domain than the particular member that are assigned the same role as the particular member.

17. **(Previously Presented)** The system of Claim 1, wherein:
one or more of the plurality of assets each comprise a registered asset, a registered asset being a resource that is protected by the security system; and
each registered asset is classified according to a corresponding asset type, which

determines how its corresponding registered assets are identified and what operations may be performed on its corresponding registered assets.

18. **(Previously Presented)** The system of Claim 1, wherein the security system is operable to authorize access to the requested asset by:

receiving from the particular member a request to access the requested asset, the request comprising:

an identification of the requested asset;

an identification of an operation to perform with respect to the requested asset; and

an identification of the domain and role assigned to the particular member; determining, based at least in part on the access control list corresponding to the requested asset and the domain and role assigned to the particular member, whether the particular member may perform the identified operation with respect to the requested asset; and

initiating an appropriate action based on the authorization determination.

19. **(Previously Presented)** The system of Claim 1, wherein the security system is operable to:

receive from the particular member a request comprising:

one or more query criteria specifying one or more assets; and

an identification of the domain and role assigned to the particular member;

add appropriate security-related criteria to the request;

execute a query to determine one or more assets satisfying the query criteria to which the particular member has read access; and

initiate an appropriate action based on results of the executed query.

20. **(Previously Presented)** The system of Claim 1, further operable to:

receive a request to define a new asset type, the request comprising one or more of a name of the new asset type, a description of the new asset type; and a format of the new asset type;

enable determination of one or more operations that should apply to the new asset

type; and

enable association of the determined one or more operations with the new asset type.

21. **(Previously Presented)** The system of Claim 1, further operable to, prior to the particular member attempting to access the requested asset:

authenticate the particular member's identification; and
assign at least one role to the particular member.

22. **(Previously Presented)** The method of Claim 7, further comprising providing at least two domains.

23. **(Previously Presented)** The method of Claim 22, wherein the plurality of roles comprise one or more of:

a domain role defining user rights within a single domain; and
a universal role defining user rights across a plurality of domains.

24. **(Previously Presented)** The method of Claim 22, wherein a first domain and a second domain are joined by a unidirectional trust relationship, allowing privileges associated with the first domain's assets to be delegated to the second domain.

25. **(Previously Presented)** The method of Claim 22, wherein a first domain and a second domain are joined by a bidirectional trust relationship, allowing:

privileges associated with the first domain's assets to be delegated to the second domain; and

privileges associated with the second domain's assets to be delegated to the first domain.

26. **(Previously Presented)** The method of Claim 22, wherein a first domain owns a second domain such that the first domain can create and destroy the second domain.

27. **(Previously Presented)** The method of Claim 7, wherein the plurality of roles are assigned to a plurality of user groups, each user group comprising one or more of the plurality of members.

28. **(Previously Presented)** The method of Claim 7, wherein each of the plurality of access control lists comprises a plurality of access control entries, each comprising:

- a domain identifier;
- a role identifier; and
- one or more privileges.

29. **(Previously Presented)** The method of Claim 7, further comprising:
providing at least two domains; and
granting the particular member, which is assigned a particular domain/role combination, ownership of a particular operation on a particular access control list, ownership over of the particular access control list allowing the particular member to grant rights to perform the operation to one or more members in a different domain than the particular member that are assigned the same role as the particular member.

30. **(Previously Presented)** The method of Claim 7, wherein:
one or more of the plurality of assets each comprise a registered asset, a registered asset being a resource for which secure access is provided; and
each registered asset is classified according to a corresponding asset type, which determines how its corresponding registered assets are identified and what operations may be performed on its corresponding registered assets.

31. **(Previously Presented)** The method of Claim 7, further comprising authorizing access to the requested asset by:

receiving from the particular member a request to access the requested asset, the request comprising:

- an identification of the requested asset;
- an identification of an operation to perform with respect to the requested

asset; and

an identification of the domain and role assigned to the particular member;
determining, based at least in part on the access control list corresponding to the requested asset and the domain and role assigned to the particular member, whether the particular member may perform the identified operation with respect to the requested asset; and

initiating an appropriate action based on the authorization determination.

32. **(Previously Presented)** The method of Claim 7, further comprising:

receiving from the particular member a request comprising:

one or more query criteria specifying one or more assets; and

an identification of the domain and role assigned to the particular member;

adding appropriate security-related criteria to the request;

executing a query to determine one or more assets satisfying the query criteria to which the particular member has read access; and

initiating an appropriate action based on results of the executed query.

33. **(Previously Presented)** The method of Claim 7, further comprising:

receiving a request to define a new asset type, the request comprising one or more of a name of the new asset type, a description of the new asset type; and a format of the new asset type;

enabling determination of one or more operations that should apply to the new asset type; and

enabling association of the determined one or more operations with the new asset type.

34. **(Currently Amended)** Software for providing secure access to a plurality of assets within a computer system, the software embodied in computer-readable media and when executed using one or more computer systems operable to:

register a plurality of members to use the computer system;

establishing a plurality of groups, each group comprising at least two of the plurality of members;

provide a plurality of roles defining user rights to access one or more of the plurality of assets, each member and each group associated with at least one role;

provide a plurality of access control lists each corresponding to an asset and defining at least one privilege for accessing the asset corresponding to the privilege, according to a member's role;

provide at least one domain defining an administrative and access control boundary around a plurality of security entities, the security entities of the at least one domain comprising:

a subset of the plurality of assets and the access control lists corresponding to the assets in the subset of the assets;

a subset of the plurality of roles; and

a subset of the members;

each privilege defined in the access control lists of the at least one domain identifying one or more roles in the domain that may access the asset corresponding to the privilege;

when a particular member attempts to access a requested asset within the at least one domain, determine at least one role assigned to the particular member;

compare rights corresponding to the role assigned to the particular member to the privileges defined in the access control list corresponding to the particular asset; and

if the attempted access is authorized for the role assigned to the particular member, allow the particular member to access the requested asset.

35. **(Previously Presented)** The software of Claim 34, wherein a requested access is one from the types read, modify, or delete.

36. **(Previously Presented)** The software of Claim 34, further operable to, prior to the particular member attempting to access the requested asset:

authenticate the particular member's identification; and

assign at least one role to the particular member.

37. **(Previously Presented)** The software of Claim 34, operable to provide at least two domains.

38. **(Previously Presented)** The software of Claim [[36,]] 37, wherein the plurality of roles comprise one or more of:

- a domain role defining user rights within a single domain; and
- a universal role defining user rights across a plurality of domains.

39. **(Previously Presented)** The software of Claim [[36,]] 37, wherein a first domain and a second domain are joined by a unidirectional trust relationship, allowing privileges associated with the first domain's assets to be delegated to the second domain.

40. **(Previously Presented)** The software of Claim [[36,]] 37, wherein a first domain and a second domain are joined by a bidirectional trust relationship, allowing:
privileges associated with the first domain's assets to be delegated to the second domain; and
privileges associated with the second domain's assets to be delegated to the first domain.

41. **(Previously Presented)** The software of Claim [[36,]] 37, wherein a first domain owns a second domain such that the first domain can create and destroy the second domain.

42. **(Previously Presented)** The software of Claim 34, wherein the plurality of roles are assigned to a plurality of user groups, each user group comprising one or more of the plurality of members.

43. **(Previously Presented)** The software of Claim 34, wherein each of the plurality of access control lists comprises a plurality of access control entries, each comprising:

- a domain identifier;
- a role identifier; and
- one or more privileges.

44. **(Previously Presented)** The software of Claim 34, further operable to:
provide at least two domains; and
grant the particular member, which is assigned a particular domain/role combination, ownership of a particular operation on a particular access control list, ownership over of the particular access control list allowing the particular member to grant rights to perform the operation to one or more members in a different domain than the particular member that are assigned the same role as the particular member.

45. **(Previously Presented)** The software of Claim 34, wherein:
one or more of the plurality of assets each comprise a registered asset, a registered asset being a resource for which secure access is provided; and
each registered asset is classified according to a corresponding asset type, which determines how its corresponding registered assets are identified and what operations may be performed on its corresponding registered assets.

46. **(Previously Presented)** The software of Claim 34, further operable to authorize access to the requested asset by:
receiving from the particular member a request to access the requested asset, the request comprising:
an identification of the requested asset;
an identification of an operation to perform with respect to the requested asset; and
an identification of the domain and role assigned to the particular member;
determining, based at least in part on the access control list corresponding to the requested asset and the domain and role assigned to the particular member, whether the particular member may perform the identified operation with respect to the requested asset; and
initiating an appropriate action based on the authorization determination.

47. **(Previously Presented)** The software of Claim 34, further operable to:
receive from the particular member a request comprising:
one or more query criteria specifying one or more assets; and

an identification of the domain and role assigned to the particular member;
add appropriate security-related criteria to the request;
execute a query to determine one or more assets satisfying the query criteria to
which the particular member has read access; and
initiate an appropriate action based on results of the executed query.

48. **(Previously Presented)** The software of Claim 34, further operable to:
receive a request to define a new asset type, the request comprising one or more of
a name of the new asset type, a description of the new asset type; and a format of the new
asset type;
enable determination of one or more operations that should apply to the new asset
type; and
enable association of the determined one or more operations with the new asset
type.